The pending claims are as follows:

1. (Previously Presented) A method of non-linear processing of at least one set of luminance, saturation, and hue parameter values of input picture signals so as to produce output picture signals based on the hue parameter value and an output luminance parameter value and an output saturation parameter value, wherein the method comprises the steps of:

       receiving input picture signals;

       determining, using a matrix converter block, input luminance, saturation and hue parameter values of said input picture signals;

       obtaining the output saturation parameter value by increasing the input saturation parameter value up to a maximum level in a saturation processing block; and

       determining said maximum level using the input hue value and the output luminance parameter value in a saturation bound evaluation block such that clipping of a color driving value does not take place.

2. (Previously Presented) The method as claimed in claim 1, wherein the non-linear processing comprises the steps of:

       determining a power depending on the hue parameter values; and

       raising the input saturation parameter value to the power.

3.　(Previously Presented)　The method as claimed in claim 2, wherein said method further comprises the step of:

adapting the power based on histogram data derived from one or more of the input parameter values.

4.　(Previously Presented)　The method as claimed in claim 1, wherein the non-linear processing comprises the steps of:

determining a power depending on the hue parameter value; and

raising the input luminance parameter value to the power.

5.　(Previously Presented)　The method as claimed in claim 4, wherein said method further comprises the step of:

adapting the power based on histogram data derived from one or more of the input parameter values.

6-7.　(Cancelled)

8.　(Previously Presented)　The method as claimed in claim 1, wherein the maximum level depends on the output luminance parameter value.

9.　(Previously Presented)　The method as claimed in claim 2, wherein the output saturation parameter value is substantially determined by the equation:

$$S' = S_{max}(S / S_{max})^{\gamma_h} \ ,$$

where S is the saturation parameter value, S_{max} is the maximum saturation value, and γ_h is the power.

10. (Previously Presented) The method as claimed in claim 3, wherein, for a predetermined hue parameter value, the power is adapted on the basis of a weighed average input saturation parameter value of the input picture signals, representing pixels in a window of an image.

11. (Previously Presented) The method as claimed in claim 10, wherein, for a predetermined hue parameter value, the power for a current window is dependent on the histogram data of a current and/or a previous window.

12. (Previously Presented) An apparatus for non-linear processing of at least one set of luminance, saturation, and hue parameter values of input picture signals so as to produce output picture signals based on the hue parameter value and an output luminance parameter value and an output saturation parameter value, the apparatus comprising:

  means for receiving input picture signals;

  means for determining input luminance, saturation and hue parameter values of said input picture signals;

means for obtaining the output saturation parameter value by increasing the input saturation parameter value up to a maximum level; and

means for determining said maximum level using the input hue value and the output luminance parameter value such that clipping of a color driving value does not take place.

13-20. (Cancelled).